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CLAIMS

What is claimed is:

- 1. A coating for a prosthesis, comprising an ethylene vinyl alcohol copolymer, wherein the copolymer can be dissolved when added to a solvent comprising iso-propyl alcohol and water.
- 2. The coating of Claim 1, wherein the copolymer comprises a mole percent of ethylene of about 27% to about 29%.
- 3. The coating of Claim 1, wherein the copolymer comprises a mole percent of ethylene of about 29%.
 - 4. The coating of Claim 1, wherein the copolymer is Soarnol®.
- 5. The coating of Claim1, wherein the prosthesis is selected from a group of balloon-expandable stents, self-expandable stents, and grafts.
- 6. The coating of Claim 1, additionally comprising an active agent carried by the copolymer for inhibiting abnormal or inappropriate migration or proliferation of smooth muscle cells.
- 7. The coating of Claim 1, additionally comprising actinomycin D, or analogs or derivatives thereof, carried by the copolymer.
- 8. The coating of Claim 1, additionally comprising paclitaxel or docetaxel carried by the copolymer.
- 9. The coating for Claim 1, wherein the copolymer acts as an intermediary tie layer between a metallic surface of the prosthesis and a coating layer carrying an active agent.

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- 10. The coating for Claim 1, wherein the copolymer acts a diffusion barrier disposed over a coating layer carrying an active agent for reducing the rate at which the active agent is released.
- 11. A therapeutic composition for inhibiting the narrowing of a region of a blood vessel, comprising an ethylene vinyl alcohol copolymer and an active agent,

wherein the copolymer comprises a mole percent of ethylene of about 27% to about 29%, and

wherein the active agent is released from the copolymer to inhibit the narrowing of a region of a blood vessel.

- 12. The therapeutic composition of Claim 11, wherein the narrowing is caused by restenosis.
- 13. The therapeutic composition of Claim 11, wherein the active agent is actinomycin D, paclitaxel, docetaxel, or analogs or derivatives thereof.
- 14. A method of forming a coating for a prosthesis, comprising the acts of:

applying a composition comprising an ethylene vinyl alcohol copolymer and a solvent to the prosthesis to form a coating, the solvent comprising iso-propyl alcohol and water, wherein the coating is formed when the solvent is allowed to be essentially removed from the composition.

15. A coating for a prosthesis produced in accordance with the method of Claim 14.

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- 16. The method of Claim 14, wherein the prosthesis is selected from a group of balloon-expandable stents, self-expandable stents, and grafts.
- 17. The method of Claim 14, additionally comprising heating the composition applied to the prosthesis to a temperature greater than about the glass transition temperature of the copolymer and less that about the melting temperature of the copolymer.
- 18. The method of Claim 14, wherein the composition additionally comprises an active agent for inhibiting restenosis of a blood vessel, wherein the active agent is contained in the coating formed on the prosthesis.
- 10 19. The method of Claim 18, wherein the active agent is actinomycin D, paclitaxel, docetaxel, or analogs or derivatives thereof.
 - 20. The method of Claim 14, wherein the copolymer comprises a mole percent of ethylene of about 27% to about 29%.
 - 21. A stent comprising a generally tubular structure coated with an ethylene vinyl alcohol copolymer.
 - 22. The stent of Claim 21, wherein the copolymer comprises a mole percent of ethylene of about 27% to about 29%.
 - 23. The stent of Claim 21, wherein the copolymer contains actinomycin D, docetaxel, or paclitaxel.
- 20 24. The stent of Claim 21, wherein the copolymer contains an active agent to inhibit abnormal or inappropriate migration or proliferation of vascular smooth muscle cells.

- 25. A solution for coating a medical device comprising:
 - (a) an amount of iso-propyl alcohol and water solvent; and
- (b) an amount of an ethylene vinyl alcohol copolymer dissolved in the solvent.
- 26. The solution of Claim 25, additionally including an amount of an active agent for inhibiting the narrowing of a blood vessel.
 - 27. The solution of Claim 25, additionally including an amount of actinomycin D, docetaxel, or paclitaxel.